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THE COLUMBIAN TRADITION

on the Discovery of America and of the part played therein by the Astronomer Toscanelli

A Memoir addressed to the Professors

Hermann Wagner

of the University of Göttingen

and Carlo Errera

of Bologna

by

Henry Vignaud

President of the 'Société des Americanistes', Corresponding Member of the 'Institut', &c.

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GENTLEMEN AND EMINENT OPPONENTS,—

My *Histoire de la Grande Entreprise de 1492* wherein (1) I maintain that, contrary to the generally accepted tradition, that undertaking had not for its object the discovery of a route to the East Indies by the West, and that the documents attributed to the Florentine astronomer Toscanelli which seem to confirm that tradition are not genuine, has been made by you the subject of two serious studies, the one appearing in the Report of the last Geographical International Congress held in Rome (2), the other in *l'Archivio storico italiano* of the same year (3).

Therein you have attacked my arguments with considerable force and not without some bitterness.

Out of respect for the rights of criticism I would have left this attack without reply, had not the matter under discussion been an event of such vast importance as the Discovery of America, which has been wholly misrepresented by tradition. But I owe it to myself and to historic truth, of which I am conscious of having been the interpreter, to prove that you have both remained under the seductive charm of the fairy-tale that in 1492 the East was sought by way of the West, which has lulled us into error for a period of four centuries.

If I have not done so earlier, it is because the terrible events which have revolutionized the world during the last few years allowed neither you nor me to resume an argumentative controversy of this kind.

I have not the presumption to believe that I can convince you. When any one has been nursed all his life in the belief that America was discovered by seeking to reach the farthest shores of Asia across the Atlantic, he cannot recover from his illusion, as it is based, not on a knowledge of facts, but upon fancies of a purely sentimental kind, fancies which no amount of demonstration can affect. But I dare hope that I may be

more successful with those whose opinions are not definitely fixed and immovable.

As, therefore, I do not solely address myself to you, and as the points on which we disagree have been under controversy some fifteen years, I must, in order to be thoroughly understood, recall them and define their character.

This obliges me to repeat statements already known to you; but such a course will have the advantage of clearly distinguishing what is still controversial from what has been definitely established, and also of showing that the chief question in dispute is not the authenticity of the documents attributed to Toscanelli, but what was the real object of the undertaking of 1492.

I have the honour to be,
Gentlemen,
Your very obedient servant,
HENRY VIGNAUD.

BAGNEUX, SEINE.
October 1919.

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FIRST CHAPTER

THE AIM OF COLUMBUS IN 1492

I. *State of the Question*

ACCORDING to a tradition, which dates from half-a-century after the discovery of America, a famous Florentine astronomer, Paolo Toscanelli, wrote in 1474 a letter to King Alphonsus V of Portugal dissuading him from seeking to reach the East Indies by way of the East, and advising him to follow a route by the West as being easier than the other because, if it were adopted, the distance to be traversed would be only 130 degrees.

This letter, forwarded by the hands of a canon named Martins, is supposed to have been accompanied by a chart or map indicating the route to be followed. Later on both these documents are said to have been sent by Toscanelli himself to Columbus, who was then planning his great undertaking of 1492 and was seeking useful information. Yielding to the counsel of the eminent astronomer, Columbus would appear to have done what King Alphonsus had been advised to do, and thus it came about that America was discovered.

To this method of representing events is due the birth of the legend of the search for the *Orient* by way of the *Occident*, and of *Toscanelli being the instigator of the discovery of America*.

Having become convinced that the documents attributed to this astronomer are spurious, I sought to prove it in 1901 (4), and since then, on different occasions, I have returned to the subject. Hence arose a long and animated controversy which still continues, and which, up to the present, has centred chiefly on the genuineness of these documents. But, as a matter of fact, this is but a secondary point and one which might be laid aside without any harm. The real question at stake, which it behoves us to solve as it is of great historic

importance, is: what was the object aimed at in 1492? inasmuch as this question is involved in the other. Did Columbus discover the New World by seeking to reach the eastern shores of Asia by a new route, or did he happen upon this discovery while employed in searching for some land or island which he had reason to believe existed in the western waters of the Atlantic?

In the first case the question of the influence of Toscanelli's speculations upon the great discovery may be raised; in the second case no such influence could have been exercised. It is this point that I would wish to make clear to my last two opponents, whose chief aim, as it seems, is to prove that Toscanelli was really the author of the documents attributed to him, an issue which, whether proved or not, solves nothing.

II. *Our sources of information respecting Columbus's search for the Indies and his dealings with Toscanelli*

How have we learned that the aim of Columbus in 1492 was to sail to the Indies, and that Toscanelli advised him to do so by pointing out the course he should steer? Solely from Columbian sources. It is Columbus who informs us that his great undertaking had that object; it is from his son Fernando and his chronicler Las Casas, who had in his keeping all the papers belonging to the family and who wrote under its sanction, that we first learn of Toscanelli's intervention in the work of the Discoverer. All the writers who have mentioned these facts have borrowed them from the same sources. Originally they were known to the Columbus family alone.

This is itself a fact which it is important to state. Assuredly it does not supply a reason for putting aside the evidence in question; but it is a reason for scrutinizing it closely and checking it whenever possible; for, valuable though they be, Columbian documents are not always to be trusted. For instance, they lead us astray by concealing the humble origin of Columbus, by attributing to him an illustrious parentage which was not his own, by speaking of his distant voyages

and his extensive learning, whereas, in truth, he had not travelled far before his discovery, and his acquirements were only elementary.

In the case in point, moreover, these documents cannot lay claim to an absolute impartiality, since they come from an interested source. They can scarcely therefore be given a preference over evidence having a different origin, evidence which either does not confirm them or flatly contradicts them, and this is what precisely happens when we seek to verify the truth of what they relate respecting the conception and the character of the undertaking of 1492. The minute investigation that we have made reveals, in fact, nothing which confirms what they say upon this matter, whereas there are all kinds of reasons for believing that the end aimed at in 1492 was merely geographical discoveries. We can see at a glance the consequences which follow. If the first voyage of Columbus, in which he discovered America, was not undertaken to sail to the Indies, Toscanelli counts for nothing, inasmuch as the documents attributed to that astronomer exerted no influence whatever upon a decision which was never made. At once it becomes a matter of indifference to criticism whether the documents are spurious or not, for even should they be genuine, their author can lay no claim to be considered as the instigator of one of the greatest events in history.

The fundamental question to be solved, the only one of interest to the historian of geography, is, therefore, as was stated above, whether Columbus in 1492 really proposed to sail to the Indies; if it can be proved that he did not, then the views generally held as to the origin of the discovery of the New World must be completely changed.

Let us therefore see what the facts reveal about this matter.

III. *The silence of Columbus about the Indies before his discovery*

The first fact to be noted is that no trace exists of Columbus having ever spoken of going to the Indies before he returned from his great discovery. This is of considerable importance.

It is with difficulty that we can realize that this extraordinary project, which Columbus claimed as his own from the first, and which, as he, his son Fernando, and his admirer Las Casas tell us, formed the very object of the ever-memorable voyage of 1492, should never have been once mentioned by him before his return to Palos in 1493, though he had for years been soliciting aid to enable him to embark upon his voyage. It has been suggested that the documents in which Columbus referred to it have disappeared or been lost. But a mere possibility must not be opposed to a reality. The fact is that Columbus, who wrote a great deal, and who must have been full of his scheme and ready to explain it to others in applying for help, has left not a single line written prior to his discovery in which he mentions it, whereas, after the discovery, he is constantly referring to it.

IV. *The objection to the Prefatory Letter of the Log Book*

A proof that Columbus had spoken of his great scheme before his first voyage is supposed by some to be found in the letter which Las Casas placed as a preface to the Log Book, a letter addressed to the Catholic Kings, in which the Discoverer recalls that by their order he undertook to go to the Indies, and that they had commanded him to do so by a route different from that usually followed.

The testimony given by this letter is not entitled to be received, for it bears no date, and it is not to be found either in the Spanish Archives of State or in the family papers of Columbus. Fernando either did not know of its existence or took no notice of it. Moreover, in several details it does not agree with the Log Book, to which it appears to be a preface, and in which no mention is made of this important mission entrusted to Columbus, as he alleges, by the Monarchs. There is no doubt that Columbus was the author of this letter, which expresses his ideas very well; but it may be taken as certain that it was never sent to its destination, and that it was written by Columbus after his discovery, and when the evolution of his fancies as to the aim he had originally proposed to himself

had taken fixed root. Its object was to establish the belief that, contrary to what the public was entitled to conclude from his contract with their Catholic Majesties, his undertaking had not the mere discovery of new territories as its ultimate end, although the whole history of the various phases of the enterprise declares the contrary.

V. *The objection drawn from the expression 'las Indias'*

Another fact which seems opposed to the assertion that Columbus's notion of finding a way to the Indies across the Atlantic was an afterthought is that in the Log Book, written from day to day, he repeatedly states that his object is *las Indias*, solely *las Indias*, and that he did not wish to delay to search for anything else.

Here, in very truth, is a most definite statement, and an insufficiently instructed critic might easily be misled. But it actually means the exact contrary to what it is supposed to mean. The Log Book of Columbus—as it has come down to us—was edited by Las Casas, and, at the period when he wrote, *las Indias* for him and for all the Spaniards of that day meant the Antilles and the lands lately discovered, and never the East Indies. In his own *Historia de las Indias*, which is only the history of the New World, Las Casas employs the expression ten, twenty, thirty times in this sense, and in his day these islands possessed no other designation.

When, therefore, Las Casas writes that Columbus insisted on his followers confining themselves solely to a search for the Indies, he explicitly confirms what all the contemporaries of the great Genoese thought: viz. that the 1492 expedition had been undertaken solely for the purpose of discovering those very islands, which immediately after their discovery were called *las Indias*. It suffices, moreover, to read without bias the Journal of their discovery to realize that it is always a question of islands to be found, islands about whose position it was thought that some information existed, and that nothing whatever is suggested about going to the Asiatic Indies.

VI. *The silence of contemporaries*

The silence that Columbus so long kept about his supposed great design is even less extraordinary than that which we find prevailing among contemporary writers who drew their information from other than Columbian sources, and who had never heard of such a project. Whichever way we turn to investigate this matter, whether we search through the documents of the period, or obtain the evidence of contemporaries, or study all the facts before, during, and after the long and numerous efforts made by Columbus to get his views accepted, nowhere do we find the slightest indication that he was planning a route to the East Indies. If all that Las Casas, the Discoverer's son, and the Discoverer himself say is true, then the absence of any mention of so important a design on the part of those who were well placed to know all about it is simply incomprehensible.

Is it said that Columbus wished to conceal what he proposed to do? That attitude could be understood if he were asking to be placed in a position to enable him to find some islands whose probable situation he thought that he had ascertained by his own observations and deductions, or by indications he had received from others, but not if his scheme was based solely on a cosmographical conception of the extent of waters which separated the extremities of the known world. During several years he had in turn solicited the help of Portugal and Spain; by dint of importunity he had gained the support of some influential persons in whom necessarily he must have confided; his scheme is submitted to a committee expressly instructed to examine it; he signs a contract with the Catholic Kings, a contract which we possess and wherein is clearly stated all that he undertakes to do; he finds some speculators who undertake to finance his voyage; yet, nevertheless, not a soul had ever heard that his principal aim—his only aim, it is sometimes said—was the discovery of a shorter cut to the land of spices! Let us take note that it is not only before the great discovery that there is no reference to such an aim. It

is the same afterwards. On his triumphant return he loudly proclaims that he has been to the Indies; he proposes a new expedition to return there, and he alone speaks of the Indies. The Catholic Kings grant him a patent of nobility wherein the services which he has rendered to the Crown are recalled, but wherein there is not a word about the finding of a new route to the East Indies, which would have been the greatest service that could have been rendered to Spain. Some years later he himself presents a memorial to the sovereigns in which he complains that the engagements contracted with him have not been kept, and enumerates on this occasion the services he has rendered, without, however, mentioning the one which would have been the greatest of all (5).

He dies: Spanish and Portuguese writers recount the story of his discoveries without any reference to the great design that, as he said, he had always had. Resende and Ruy de Pina, who were in a position that enabled them to get information on the subject from King Juan; Bernaldez, who talked with Columbus on the morrow of the discovery; Oviedo, who assisted at his triumphal entry into Barcelona in 1493, and who knew personally his two sons; Gomara, who was able to converse with some of the very heroes of the great Discovery; Garibay, who was the historian of Castille; Mariana, whose authority was great; Barros, who was acquainted with every act of Columbus in Portugal, all are silent about a fact so interesting and so important.

All of them, on the other hand, and their contemporaries without exception, only see in Columbus a man who wished to do what he succeeded in doing. It is only after the publication of the letter attributed to Toscanelli by Fernando Columbus in 1571, and after 1600, when the manuscripts of Las Casas were made known, that the Columbian Version about the search for the Orient by way of the Occident in 1492 began to appear, and finally became the accredited story thanks to Herrera, who completely adopted it, relying solely on Las Casas and indeed, with regard to this point, literally copying him.

VII. *The silence of contemporary documents*

But what puts it beyond all doubt that in 1492 there was no question of going to the East Indies is the contract Columbus made with the Catholic Kings for the carrying out of his scheme. In that official document, drafted by Columbus himself, the authentic text of which is in our possession, the rewards to be conferred upon him for the discovery of new islands or territories are minutely stipulated, but nothing is said therein with regard to proceeding to the East Indies by a route other than that usually followed (6). Thus it happens that Columbus, who formulates his own conditions, who enumerates the things he proposes to do in exchange for the highest prerogatives, is absolutely silent about the most important of them all, the scheme that was intended to change completely the conditions of the commercial relations of Europe with the spice-producing countries of the far East, which, as he declared later on, he had constantly pursued, and which, though it could not be carried out, has for ever placed him in a category apart from and far above all the other great travellers who have gone forth to the discovery of the world!

VIII. *The Columbian evidence*

As the statements of Columbus, of his son, and of Las Casas, that the 1492 expedition had for its object the discovery of a new route to the East Indies, find no support among the documents of the time, this weighty affirmation rests solely upon the testimony of these three. Do they suffice? It has been said that they do. Those who are of this opinion declare that Columbus was not a knave, that no reason exists to doubt the truthfulness of Las Casas; that the Discoverer's son was a learned, wise, and highly-esteemed person; that the two latter were in a position to be well-informed about all that concerned the undertaking of 1492, and that Posterity, by accepting and ratifying their testimony, has made it unimpeachable. To argue thus is to settle the question without

even examining it. Without throwing doubt on the good faith of Columbus, it is possible to explain away his language as due to illusions engendered in his mind by his limited cosmographical knowledge and the lack of method in the employment of his talents. As regards Fernando Columbus and Las Casas, the first could scarcely contradict his own father, and the second, who was a fervent admirer of the illustrious Genoese and devoted to his family, may have been led astray on this point.

Under any circumstances it does not seem possible to admit that these three witnesses, two of whom in reality only repeat the statement of the first—himself the person most interested in the case—can prevail against the formidable array of evidence that can be brought against them.

IX. *The silence of Santangel*

If the fact that no one except Columbus, his son, and Las Casas knew that the goal of the enterprise of 1492 was, as they claim it to have been, to reach the East Indies by way of the Western Ocean, together with the absence of all mention of this goal in the contract which bound Columbus to their Catholic Majesties, does not constitute sufficient proof that this design did not originally exist, we shall find that proof in certain particulars connected with the presentation, acceptance, and carrying out of the enterprise which clearly demonstrate its real character.

The first information that we get on this matter is contained in the reason given by Las Casas for the departure of Columbus from Portugal. After having explained his scheme to the geographical commission appointed by Juan II. our Genoese, says Las Casas, learned that a caravel had been secretly dispatched to verify the truth of his assertions.

It is manifest that, if the scheme Columbus laid before the commission had consisted in the application of a scientific theory as to the possibility of crossing the whole and then unknown width of the Atlantic to reach the shores of Asia,

no attempt would have been made to check its value. We have here a hint, if not actually the proof, that the scheme which Columbus submitted to the Portuguese, and which was, says Las Casas, the same scheme that he took with him to Spain, dealt with the discovery of one or more islands, the position of which he had vaguely indicated, a thing, adds Las Casas, which he determined never to do again.

We need not pause to consider the advocacy of Santangel, a high officer of the Court, in favour of the adoption of Columbus's scheme, on all the advantages of which he lays stress without making mention of a new route to the East Indies; let us turn to the Capitulations concluded between the Sovereigns and Columbus, which are drawn up with the most minute care and stringency. Not only, as has already been said, is there no mention of the East Indies, but it is stated therein that Columbus undertakes to annex to the Crown certain islands and lands, and—surely a most remarkable fact which, nevertheless, has received little or no notice—declares that he has already discovered them: *de los que ha descubierto en las mares oceanas* (7).

It follows from this documentary evidence that Columbus asked the Catholic kings for ships with the intention of sailing in search of islands already known to him, and not of undertaking the discovery of a new route to the East Indies.

X. *The evidence of Maldonado*

To the testimony of the Capitulations we must add that of Roderigo Maldonado, an important personage, who confirms it. (8) This gentleman was Governor of Salamanca; he had been a Councillor of the Crown, and was a *member of the commission appointed to investigate the proposals of Columbus.* Interrogated as to what he knew about the matter, he replied on oath that before this commission was appointed the only discussion was about islands which Columbus had discovered.

What can be clearer? Let it be remembered that this witness was summoned at the instance of Diego Columbus, and that

his testimony cannot be tainted with partiality to the enemies of the great Genoese, to whom he appears to have been most favourable. Had he known anything which might have enhanced the credit of Columbus, such as the discovery of a new route to the East Indies, or the hope of it, he would not have failed to declare it.

XI. *The course laid and the final orders given by Columbus*

The facts which have just been noted are not the only ones which demonstrate that in 1492 the attention of Columbus was solely fixed on the islands which were actually discovered, viz. the Antilles. Several others may be mentioned having the same import, and among them the two following:

The ever memorable expedition is ready and Columbus is about to sail. If his course is for Cypangu, as has been said, or, as also has been said, for the dominions of the Great Khan, which occupy the regions of Eastern Asia nearest to Western Europe, he has only to steer due west inclining slightly to the south. This he did not do. He drops down to the twenty-eighth parallel at the Canaries, where he turns westward and follows that parallel in quest of the islands and steadily refuses to quit it until the hour when, despairing of finding any on that line, he consents to change his course in response to the entreaties of Pinzon.

The proof that he took this parallel, from which he obstinately refused to diverge, because he had reasons to believe that in following it he must find that for which he was in search, is furnished by the orders he gave to the officers of the flotilla at the moment of weighing anchor.

'When', said he, 'you have made 700 or 750 leagues westward of the Canaries, you must no longer carry on at night, for at that distance land will be seen.'

We have not the text of that important order, but we have the formal evidence of Fernando Columbus that it was given and even several times repeated (9).

Fernando Columbus was furthermore convinced that his

father had definite information on this subject, for he assures us that by continuing to follow the course he had originally laid he would have reached the island, which was at first supposed to lie 700 or 750 leagues from the Canaries.

XII. *Other facts having the same bearing*

I just mention in passing the following facts, which are quite as significant as those already quoted:

The evidence of Las Casas that Columbus spoke of that which he proposed to discover as though he already possessed it under lock and key, and that he owned a map, in which he placed the greatest confidence, with the Antilles marked upon it.

The ignorance of all the seamen who assisted in the preparation of the 1492 expedition, or who actually took part in it, about any other object in the voyage than the discovery of new islands.

The anxiety with which during the voyage a look-out was kept for the islands marked on Columbus's map, and his disappointment at not finding them.

The fact that the crew of Columbus's ship wanted to sail back after passing the limits where he had said land would be found, for fear that the provisions would give out; a fact which alone is sufficient to prove that it was not intended to go as far as the shores of Asia.

XIII. *The objection drawn from the credential letters given to Columbus for the Great Khan*

To the facts just related, and which all point to the same conclusion, others with a like import might be added; but those which have been enumerated in the preceding pages should suffice to convince any unprejudiced mind that the great expedition of 1492 had not for its aim the crossing to Asia, but that the sole object for which it had been organized was the discovery of one or more islands, the existence of which in the Atlantic appeared to be certain.

Nevertheless, such is the power of a settled conviction, and so great is the authority given to the word of Columbus and that of his first two biographers, that a keen search has been made into the little-known history of the origin of the 1492 undertaking with the view of discovering some facts of a character to confirm the Columbian Tradition. It was thought they were found in the credential letters given to Columbus for the Great Khan, and in the search for Cypangu, keenly undertaken by the Genoese at the close of his expedition.

Let us first speak of those credential letters, the granting of which suggests that, before the ships sailed from Palos in 1492, it had been foreseen that the expedition might reach the eastern shores of Asia, where reigned the potentate known under the title of Great Khan. This fact, which is out of harmony with the others, might indeed throw doubt upon their testimony if it did not stand alone, and if, although at first sight quite irreconcilable with them, it was not capable of explanation.

Now, when Columbus, who had lost all hope of his scheme being accepted by the Spanish sovereigns, went to Palos in 1491 with the intention of leaving Spain, the monks of La Rabida, who wished to retain him, spoke to him of Pinzon, a well-known seaman of the place, whose intervention might alter the situation. At that time Pinzon happened to be in Rome, but Columbus awaited his return, and then got into communication with him. He now learned that this sailor, who had great nautical experience and much influence in the Palos district, had himself some idea of going in search of the Isle of Cypangu, or Japan, about which place he had obtained some information in Rome. What then passed between the two adventurers is unknown, but Pinzon's intervention, either direct or indirect, through the medium of the Prior of La Rabida, is certain, and Columbus was recalled to Court (10). On again returning to Palos with his contract signed and sealed in his possession, the future Admiral sought, without Pinzon's help, to procure the ships and crews that he required. Columbus's conduct on this occasion is capable of only one

explanation. It is clear that when he left La Rabida to rejoin the Queen he was already more or less engaged with Pinzon, for otherwise Pinzon and his protector, the Prior of La Rabida, would not have intervened on his behalf. It is therefore likely that the Genoese, in his arrangements with the Catholic Kings, kept in mind this mariner's views about Cypangu. Nevertheless, after having obtained powers which enabled him to act alone, powers which he evidently thought sufficient, we find him taking a line of action which appears to show that he wished to keep Pinzon out of the expedition.

Had he found his demands excessive, or, rather, did he dread the company of a lieutenant whose devotion would not be entirely at his service? Whatever may have been the reason, it was only on the failure of his efforts to organize his expedition that he had recourse to him and obtained his help. On what terms? We do not know them. That is one of the many facts about the history of the 1492 expedition which has remained in the dark. Even Las Casas, who has stated that an agreement existed between the two men, does not appear to have known its conditions.

Whatever that agreement may have been, the co-operation of Pinzon was both earnest and effective; but we must take note of the motive he assigned for this assistance. From the moment that he devoted himself to the work in which Columbus was engaged, we find Pinzon boasting with enthusiasm about the wealth of Cypangu to the sailors who hesitated to enrol themselves for the undertaking, and he kept dangling before their eyes the picture of a lucrative adventure.

It seems reasonable to infer from this that Pinzon's needful help was only obtained on the condition that the projected cruise should also include a search for Cypangu, and that in order to satisfy him Columbus had obtained a letter addressed to the Great Khan, the supposed lord of that Asiatic region in which that island was situated.

This is evidently only a supposition, but it fits in with all the known facts, and it explains the attitude of Pinzon, who had held aloof at first, but afterwards promised his concurrence

and devoted all his means and energies to the success of the enterprise.

It is true that he may have had some other reason for joining Columbus, for Las Casas, while admitting that he had a motive for doing so, does not tell us what it was. We are, however, confirmed in the belief that he was chiefly induced to join the expedition by the hope of finding Cypangu, because during the preparations, as well as during the voyage itself, his thoughts were always centred on that island, whereas Columbus was solely preoccupied with the island that he had gone out to find.

The manner in which the expedition ended also shows that the intervention of Pinzon must have been due to this hope, and, at the same time, it explains the search for Cypangu by Columbus.

XIV. *Objection drawn from the search for Cypangu*

Probably Columbus did not think that he would have occasion to make use of the letters to the Great Khan with which he was furnished, for it is quite certain that at first he had no intention of reaching Cypangu. The various details of the preparation for his expedition which we learn from the numerous depositions made at several judicial proceedings, and those mentioned in the Log Book itself, can leave no manner of doubt on that point. Moreover, the sole engagement of Columbus to the Catholic Kings was to annex to the Crown of Castille certain new islands and territories, in which Cypangu, a large and civilized island already well known, could not be included. It is nevertheless true that in the end Columbus was smitten with a desire to reach this island and to present the letters to the Great Khan, who was, he thought, its sovereign. But this only occurred later and as the result of a revolution in his ideas which may be traced in his entries in the Log Book. One can therein see that, as he sailed farther from the Canaries without finding a sign of the existence of any land, Columbus began to lose trust in the accuracy of the information which had led him to steer his

course along the twenty-eighth parallel. It was even said at the time that after sailing westward 800 leagues Columbus contemplated returning (11). But this was not proved, and it is not even probable that it was he who raised this question, though without doubt it was suggested by some one.

However that may be, on the 6th of October Columbus appears undecided what to do, and Pinzon suggests that they should alter their course to that which, according to him, would lead to Cypangu. Columbus at first refuses; but the very next day, upset or shaken by the want of success of his own calculations, and probably influenced also by the language of his lieutenant, who never ceased speaking about the famous island of Cypangu, he thinks better of it and adopts the course suggested by Pinzon, which, as it turned out, led him to Haiti. From that moment he acts as though he believed that he was in the Indian seas and begins to look for Cypangu, the island the very name of which he had not once written beforehand, and which he finally recognizes in Haiti, to which he gives the name of *Spanola*.

Here it would seem are facts which clearly show that the discovery of Cypangu was not the end Columbus originally proposed to himself, and that it was only on the eve of his arrival at the Antilles that he consented to look for it.

XV. *Antilia was the island sought by Columbus, Cypangu was the island Pinzon had in view*

Professor Errera does not see things in the manner in which they have been represented here. According to him the fact that the Portuguese historian Ruy de Pina, who relates the interview which Columbus had with King Juan on his return journey, says that he came back from the discovery of Cypangu and Antilia is a proof that this discovery was the object of the 1492 enterprise, and that, consequently, the East Indies were his original destination, inasmuch as Cypangu is situated within the limits of Eastern Asia.

This inference is scarcely justified. Columbus certainly

returned from the discovery of Cypangu—as he imagined—but proof is wanting that he had set out to discover it, and all the facts contained in the documents and mentioned in the preceding paragraphs show that, if it be true that Pinzon thought of Cypangu, Columbus himself had in his mind another island, which he did not think was so remote.

Columbus has never named that island, but we are not without information on the subject. According to all the testimony of the time it was one of those which were discovered. The larger portion of the testimony goes no farther than this, but there is one which is very definite, that of Agron, who says that the island was Antilia (12), and thus confirms the report of Ruy de Pina, who was himself present at the interview between Columbus and King Juan mentioned above. Vespuccio also says that Antilia was discovered by Columbus; it is further to be noted that this island, which appears on a number of maps of the fifteenth century, disappears from all those which were made after the expedition of 1492.

I submit to all impartial criticism that the summary analysis made above of the facts bearing on the memorable voyage of 1492 establishes that the voyage had not for its object the discovery of a route to the East Indies by way of the West, but, as Columbus's contract with their Catholic Majesties indicates, the discovery of an island which he does not name, an island of which he claimed to know the existence, and which very probably was Antilia; that it was only after coming to an agreement with Pinzon at Palos that the question about Cypangu arose; that no effort was made to find it until all hope of finding the other island had gone, and that the belief of Columbus that he had reached the East Indies, a belief he kept to his dying day, was then formed for the first time.

SECOND CHAPTER

THE DOCUMENTS ATTRIBUTED TO TOSCANELLI THE LETTER OF 1474 AND THE MAP

I. *The documents, whether genuine or not, are foreign to the discovery of America*

In view of these inferences, which force themselves on any impartial seeker after the truth, the principal evidence of which I have here only been able to outline, though much more might be added, resting on genuine documents and acknowledged facts, which I have carefully garnered in my *Histoire de la Grande Entreprise de 1492*, I ask what place can be found in the history of the discovery of America for the letter attributed to Toscanelli or for the map which is supposed to have accompanied it, a map which Professor Wagner has so laboriously reconstructed; and I boldly answer: None.

What does it matter to the writer of such a history whether those documents are genuine or forged, if Columbus never did what they recommend should be done? What matter whether, granting that they were authentic, Columbus knew of them even before his first voyage, if he never made use of them in planning and carrying out his expedition? Now, as has just been shown, that is precisely the case. Whether or not Toscanelli is their author, whether or not Columbus was acquainted with them, they influenced in no way the 1492 expedition which resulted in the discovery of America, and, from that point of view, all discussion as to their authenticity is idle. What is of importance to us, what is solely of interest in the question, is not to ascertain if in 1474 Toscanelli really advised Columbus to attempt the westward route to the East Indies because he calculated that region was only 130° from the Old World—a calculation, be it said in passing, which

reflects little credit upon the cosmographical knowledge of that astronomer—but to discover whether that conception, erroneous as it was even for the state of knowledge of the period, had any influence on the work of Columbus. In order to maintain that it had such an influence it becomes, in the first place, necessary to show that in 1492 Columbus proposed to sail directly to the eastern shores of Asia as recommended by Toscanelli. This, not one of my critics has dared to maintain. In default of any proof we are driven to the conclusion that Toscanelli had nothing to do with the discovery of America, and that the argument which would give him credit for it is based on a misunderstanding of the facts.

II. *The documents are spurious*

If, in the circumstances with which we are dealing, it is a matter of indifference to criticism whether the documents attributed to Toscanelli are genuine or not, because in neither case can this astronomer be considered as the initiator of the discovery of America, it does not follow that they are or could be authentic. The historical and critical reasons which prevent me from accepting them as genuine are too numerous to allow of the least doubt on that subject. I have explained and dwelt on those reasons elsewhere, and all my arguments thereon are known to the two critics to whom I now specially address myself. But, for the benefit of those readers who have not followed the long controversy on this subject, it is necessary here to recapitulate at least the most important. They are the following:

The ignorance of all Italian and Portuguese writers as to the relations that Toscanelli is supposed to have had with King Alphonsus, and the fact that the alleged intermediary between them is absolutely unknown to these writers.

The silence of Columbus respecting his relations with Toscanelli, although he was fond of naming the learned men whose views justified his own.

The fact that the existence of documents of such importance

as those attributed to Toscanelli was made known only from Columbian sources.

Their tenor, which forbids us to regard them as coming from a man of real learning.

The differences in the versions of the text.

To these facts, already so convincing in themselves, and to others of equal value which will be found in the Appendix, let us add the improbability that a celebrated scholar, whose opinions pledged his reputation, would have dared, when replying to a king who had asked his advice on the point, to inform him, as an ascertained fact, that the sea space separating the extremities of the known world, a space which had never been traversed, was only 130°. This statement shows that the writer of the letter had simply adopted the extravagant measurement of the world made by Marinus of Tyre, a measurement which might have been accepted by an amateur geographer, but certainly not by Toscanelli, who was well acquainted with the writings of Ptolemy, since he possessed an edition of his cosmography and was to revise a translation of the work made by Rogermontanus, and consequently must have known that Ptolemy had demonstrated the inaccuracy of this measurement. Inasmuch as the letter of 1474 sums up the very views that Columbus always expressed after his discovery, and as we know when and where he acquired those views—and their author was certainly not Toscanelli—we have here a proof that it was the writer of the letter who copied Columbus and not Columbus who copied the letter.

Let us further call attention to the decisive fact as stated by the contemporary Italian historian Vaglienti, that Toscanelli had advised the Portuguese to go to the Indies by sailing south-east, for this advice is in flat contradiction to that which he is supposed to have given in 1474 to King Alphonsus, who, moreover, at that date had no thought of such a voyage.

To resume, the genuineness of the letter and map attributed to Toscanelli rests solely on the evidence of Fernando Columbus and Las Casas, and it is the similarity, or rather the identity, which exists between the cosmographical fancies of

the author of these documents and those of Columbus that is given as a proof that the 1492 expedition had the East Indies for a goal.

It has been seen that on this point it is impossible to reconcile the evidence of the first two biographers of the great explorer with the well-established fact that in 1492 there was no question of going to the East Indies. Farther on, additional reasons will be seen for setting aside what Fernando and Las Casas say with reference to Toscanelli's intervention in this affair.

As to the suggestion that Columbus appropriated the ideas expressed in the letter of 1474, it will also be shown that it cannot stand the test of the most trivial critical examination.

III. *Professor Errera's quaint supposition*

The fact that Canon Martins, through whom King Alphonsus is supposed to have consulted Toscanelli, is otherwise entirely unknown does not disconcert Professor Errera. This elusive messenger, he tells us, is quite superfluous. Toscanelli may well have written directly to the King of Portugal, and sent him his letter and map by some ordinary messenger whose name was not worth recording.

It is not quite easy to give a name to this ingenious hypothesis, but it may at least be described as quaint, for it amounts to saying that an eminent Italian addressed the Portuguese monarch in the following terms:

I learn that you wish to wrest from my fellow-countrymen the monopoly of the spice-trade, and in order to do so you seek to reach the Indies by sea-route to the East. But you can carry out your scheme far more easily by striking to the West, and I forward you a chart which will help you to do so. By taking the course I have indicated thereon you can easily appropriate the rich traffic which we alone have hitherto enjoyed.

Together with Uzielli, the learned Professor of Bologna further admits that, after advising King Alphonsus to take the

western route, Toscanelli might at a later date recommend to the Portuguese that they should take the eastern. The very least that may be said of this suggestion is that it makes the conduct of the Florentine astronomer very hard to explain.

IV. First Objection: *The silence of Columbus can be explained*

We are told that the silence of Columbus respecting Toscanelli proves nothing. The Discoverer, who was wont to hide the sources of the information supplied to him, would take great care not to mention even the name of the author of his scheme. Thus it is taken for granted that the thing which has first to be proved is proved: viz. that Columbus's design in 1492 was to sail to the East Indies.

It is true that the famous Genoese kept secret his information about the island that he proposed to discover, and Las Casas has told us why he did so; but he was not in the habit of disguising the sources of his speculative opinion; on the contrary, he was fond of mentioning them, and it was in his interest that he should do so.

V. Second Objection: *Columbus himself copied the letter of 1474*

It is a fact that on the fly-page of a book—the *Historia Rerum* of Pius II, printed at Venice in 1477—annotated by Columbus and his brother Bartholomew, there exists a manuscript copy of a Latin version of the 1474 letter, and some experts have held that it is in the handwriting of Columbus. But others are of a different opinion, and what confirms the latter view is the fact that neither Fernando Columbus nor Las Casas saw this copy, which covers an entire page, although they both had the volume in their hands. It is evident that if they had seen it, especially if they had recognized the handwriting of Columbus, they would not have failed to use it in preference to the varying texts of the letter which they have reproduced. From this fact we are entitled to conclude that

this copy did not exist in the days of the first two biographers of Columbus—that is to say, in 1561 at the latest, the date at which Las Casas ended his *Historia*.

VI. Third Objection: *Certain of Columbus's reminiscences*

Humboldt, who wrote at a time when the autograph writings of Columbus were unknown, noticed in the prefatory letter to the Log Book a phrase which is substantially found in the letter of 1474, and this discovery is the starting-point of all that has since been said about Toscanelli being the initiator of the discovery of America. But now we know from the notes which Columbus wrote in his copy of Marco Polo that the phrase comes originally from that work.

VII. Fourth Objection: *The identity of certain cosmographical notions of Columbus with those contained in the letter of 1474*

There is no doubt that the ideas which Columbus expressed concerning the nearness of the East Indies and the route which should be followed to reach them are exactly similar to those found in the 1474 letter: hence the conclusion that this letter is their source.

This argument might stand before the publication, in the *Raccolta Colombiana*, of the facsimile of all the notes which Columbus wrote in the *Imago Mundi* of Cardinal d'Ailly, the *Historia Rerum* of Pius II, and in *Marco Polo*, but the notes now prove that it was from these three works, and principally fromt he *Imago Mundi*, that the explorer has borrowed all he has said about the proximity of the eastern shores of Asia, about Cathay, and about the Great Khan. The letter of 1474 counts therefore for nothing in the formation of those ideas.

It can also be shown that the cosmographical conceptions of Columbus were of tardy growth. One of the three books which suggested them, the *Imago Mundi*, belonged to his brother Bartholomew, who did not see Christopher again until 1493, after a separation of ten years. It is clear, therefore, that Columbus must have made his annotations in that year.

Again, the *Marco Polo* of Pipino was not printed until 1485; now, by that date Columbus had already submitted his scheme to the King of Portugal, the same scheme, says Las Casas, as he later carried to Spain.

This tardy growth can further be inferred from the fact that in his voluminous Log Book Columbus never uses a word indicating that he had then any theory upon the proximity of the East Indies. The same remark applies to his second voyage as judged by its Log Book, whereas the Log Books of the third and fourth expeditions show that he then was absorbed in the idea. Another and more important piece of evidence having the same bearing is the statement of the geographer Jaime Ferrer, a contemporary and admirer of Columbus, that in 1495 the Discoverer still reckoned according to Ptolemy's measurement, which gave sixty-two and a half miles to the degree, whereas all the cosmographical system of Columbus is based on the measurement of Alfragan, borrowed from the *Imago Mundi* who only counts fifty-six and two-thirds to the degree.

These facts demonstrate that his cosmographical system, which he first declared in 1498, was not yet formed in 1492, and that consequently at that date he could not have conceived the idea of the possibility of reaching the East Indies by way of the West.

VIII. *The reduction to 130° of the unknown maritime space to be crossed*

It has been seen that one of the most important objections raised against the genuineness of the 1474 letter is the fact that its author reduces to 130° the maritime space dividing the extremities of the then known world, an estimate which could not have been made by any learned geographer, and least of all by Toscanelli, who was well aquainted with Ptolemy and knew that he had exposed the error of this idea, the original author of which was Marinus of Tyre, a geographer of the second century. This objection is of so formidable a nature

that all the defenders of the Columbian tradition have sought to set it aside. Uzielli, Professor Gallois, Signor Carlo Errera, Professor Hermann Wagner, and others have all tried to do this, but without success. It is easy to tell those who are unacquainted with the cartography of the Middle Ages that Toscanelli might very well do what others had done; but, when called upon to produce the maps which justify these reckless assertions, they are very much embarrassed or quote erroneously.

Uzielli does not go so far as to name any map; Mr. Gallois mentions two, the dates of which are uncertain and cannot in any case be anterior to 1474; Professor Errera plunges still deeper—he cites three maps upon which Toscanelli might have relied: that of Roger Bacon, a Franciscan friar of the thirteenth century, that of Cardinal d'Ailly, who wrote in 1410, and that of Behaim, in whose learning no one has confidence.

It is indeed surprising to find a justly esteemed writer on geography quoting such authorities, for every one knows that these three authors had no qualification or competence to deal with it. Behaim has only copied Pierre d'Ailly, who had copied Bacon; and Bacon, although a thinker of the highest value, confined himself in the present case to the reproduction of a chimerical idea of some Greek dreamers. It is really leading an unwary reader astray to tell him that a learned mathematician and astronomer like Toscanelli could have been influenced, on a geographical question, by opinions of so little weight. Such amateur cosmographers as the Cardinal d'Ailly and Behaim might give credence to them, but not Toscanelli.

IX. *Ptolemy's measurement according to Professor Wagner*

My most eminent opponent, Professor Wagner, has realized that he cannot justify Toscanelli for adopting the measurement of Marinus of Tyre unless he can show that its correction by Ptolemy is without value.

Reviving an argument which Uzielli employed unsuccessfully, Professor Wagner says that Marinus and Ptolemy were

only divided by two opposite opinions respecting the extent of the habitable world, which is the same as saying that the one opinion was no better than the other. He does not add, as Uzielli did, that no account is to be taken of these opinions because at the time of these writers means for measuring the earth scientifically were wanting, but that is evidently what he thinks, for, like Uzielli, he confounds, perhaps intentionally, the measurement of the whole circumference with that of the habitable world. The one measurement was at the period surrounded by almost insurmountable difficulties, the other was perfectly possible.

It suffices, moreover, to read the chapter in which Ptolemy discusses the measurement of Marinus to realize that his measurement and that which Ptolemy substituted for it were based on the reports of actual journeys and road-books which could give fairly accurate results. In the case of our two ancient cosmographers it was not a matter of loose opinions, guesses, or risky speculations on this subject, but of putting into shape, and drawing definite conclusions from, actual documents which they had before their eyes, and which are enumerated. True, the results thus obtained might be and actually were erroneous, but none the less they were based on serious study of such a scientific character as it was then possible to give to a subject of this kind. I consider it, therefore, as established that the corrections made by Ptolemy in the measurements of Marinus were not opinions advanced against other opinions, but that they were the fruit of a critical study of documents bearing upon the matter under examination, and I feel convinced that a scholar like Toscanelli, who could not have failed to see it in this light, would have taken account of the fact.

To my assertion that, although Ptolemy was mistaken in giving 180° to the habitable world, a matter of 45° too much, it was not allowable to hesitate between his measurement and that of Marinus, which was 95° too much, my critic opposes a simple denial, which amounts to saying that Toscanelli was entitled to choose one just as well as the other.

I should have been interested to see how a learned geographer justified this singular negation; but, to my great regret, he merely says that, generally, the Greek geographers assigned, as Ptolemy had done, one half of the whole circumference to the habitable world, whence doubtless it follows for him that Toscanelli might have done the same.

For the ordinary reader who is not specially versed in the study of such questions as these, the simple affirmation of a man like the Professor of Göttingen may suffice. But, even though he should think me exacting, I must reply that it does not suffice for me, and that I seek its explanation. It will not be hard for me to find it.

X. *The true extent of the habitable world as known to the Greek cosmographers*

The measurement of the circumference of the globe and of the extent of the known habitable world *generally* accepted by ancient Greek writers on geography was that of Eratosthenes and Hipparchus, which gave 250,000 stadia, in round figures, to the great circumference and 70,000 stadia, more or less, to the known habitable world. That was the measurement accepted by Strabo, Polybius, Pliny, and other equally competent authorities. That was, if one may so call it, the national measurement of the Greeks; the measurement which had been made according to astronomical observations undertaken by men of acknowledged ability in science, and on methods which modern criticism has recognized as those that, in similar circumstances, would be employed in our own day.

As regards these two measurements, the first and the larger one could not be absolutely exact because the Greeks lacked the necessary means to establish it; but this was not the case with the other, which they were in a position to determine on positive data, naturally subject to error but in no way conjectural. Let this be as it may, the reckoning of the extent of the habitable world at 70,000 stadia, more or less, was, as I have just stated, accepted by all competent Greek

geographers. Let me add that it was calculated on a mean parallel on which the whole circumference was 200,000 stadia; hence it follows that the habitable world was supposed to embrace but a third of the entire globe.

For the applause of the multitude any one may protest against this calculation, as Professor Wagner has done; but I can produce here the names of ten modern geographers fully qualified to pronounce on such a matter, though they may not all be Germans, who are agreed that the measurement of the known world generally accepted by the Greeks was that of 70,000 stadia in round figures. To that formal assertion Professor Wagner opposes the measurement of Posidonius; but if he will condescend to follow me a moment, he will perhaps learn something which he does not know or which he has concealed.

XI. *The measurement of Posidonius*

Posidonius was a Greek astronomer of the first century before Christ, and was highly esteemed by Pliny, Strabo, and other writers, apparently with good reason. To him is attributed a measurement of the circumference of the globe upon which we have contradictory information. According to some, the astronomical observations he had made for this purpose had given 240,000 stadia for the great circumference; according to others, he had obtained only 180,000 stadia. It is to the latter estimate that many Greeks gave the preference, and it was adopted by Ptolemy on grounds that are not quite clear; and it is the measurement which Professor Wagner has in mind when he says that this geographer only followed the example of the Greeks in general by attributing to the habitable world an extent equal to half its circumference. I dare say that a real scholar was not justified in giving weight to the measurements attributed to Posidonius. Moreover, we must first remark that in the one measurement, as in the other, the extent of the habitable world remained for him what it had been for Eratosthenes, Hipparchus, Strabo, and others, namely 70,000 stadia. Strabo's evidence is formal on this point, and

it is clear that if we make 70,000 stadia half the circumference of the globe, we must measure along a parallel that has a circumference of 140,000 stadia. Furthermore, in order to obtain that result one must choose the smaller of the two measurements attributed to Posidonius. If the greater is chosen, the proportions are different: the extent of the habitable world remains at 70,000 stadia, but those 70,000 stadia no longer form half of the whole circumference of the globe.

Is there any reason for giving a preference to the smaller of the two measurements attributed to Posidonius? None whatever; and if a choice had to be made between them, it should rather be in favour of the greater, which is known to us, thanks to an astronomer, Cleomedes, who gives information on the astronomical process employed by Posidonius for coming to that result, whereas we know nothing concerning the lesser measurement, about which Cleomedes does not say a word.

But not only is there no reason to prefer the smaller measurement which Strabo formally repudiates; there is good reason to set both the one and the other aside. Learned criticism has in fact submitted both measurements to a severe examination, and has concluded that Posidonius merely gave two examples of the way in which the circumference of the globe might be ascertained. It was a French scholar, M. Letronne, who proved this, and, if my opponents place no confidence in his learning and judgement, they will not contest those of the famous German geographer, Herr Berger, who has arrived at the same conclusion.

Relying on these facts, I say that in our investigation we are not to pay attention to the opinions fathered on Posidonius as to the measurement of the globe, and that we are not entitled to say that the measurement of the habitable world accepted by the Greeks of the first century was that given by Ptolemy, namely, the half of the whole circumference.

Furthermore, as regards Ptolemy, there is another reason for setting aside his measurement of the habitable world known to all geographers worthy of that title; he gave to the Mediterranean some twenty degrees too much, an error which,

by the time of Toscanelli, had been corrected in a number of well-known Portolan charts.

I will not dwell longer on this point, which I have fully developed in the first of my *Nouvelles Études*, Vol. I, of my *Histoire de la Grande Entreprise de 1492*, but I will venture to add that, whatever may be the authority Professor Wagner owes to his vast learning, and precisely because of that authority so justly acquired, he has no right to give his own particular interpretations of certain documents as if they were established and universally accepted.

XII. *The World-maps of the Middle Ages*

As far as I can see up to the present, Professor Wagner gave no reason at the Congress which could justify a learned astronomer of the second half of the fifteenth century in declaring that Asia was near to the western seaboard of Europe. All that was then known should have led him to think the contrary.

Was the Professor more accurate in saying, as he did say, that the maps of Bianco of 1436 and of 1448, that of Genoa of 1447 or 1457, and that of Fra Mauro of 1459 give to the world known to the ancients an extent equal to half of the total circumference?

Notwithstanding the high value that I place on the opinion of the learned professor, I must on this matter permit myself to make the most marked reservations. Better than any one, Professor Wagner knows that the reading of these old maps is difficult and uncertain, and that geographers of high standing have interpreted them differently. Thus the author of the best book we have on Behaim and his famous Globe, Ravenstein, is of opinion that the map of Fra Mauro gives only 134° 36′ to the known world, and Nordenskjöld is substantially in agreement with him on this point. Lelewel, whose opinion on such a subject is not to be despised, considers that the map of Genoa embraces only 142 degrees, a distance which Ravenstein reduces to 136 degres. To these authorities only the opinion

of Fisher can be opposed, but it is known that this scholar based his decision on the doubtful reading of an unintelligible legend, which, moreover, others have read differently.

I am, therefore, entitled to say that it has not been proved that the Greeks gave to the known world the half of the whole circumference, and still less has it been proved that Toscanelli was justified in preferring the measurement of Marinus of Tyre to that of Ptolemy.

XIII. *The learned map Toscanelli is supposed to have made*

Let us now come to the last and most formidable argument of my adversary. It would seem that, having despaired of victory if the discussion was confined to the grounds already traversed, he resolved to transfer it to a very different arena, in which his special acquirements must assure him the advantage. From a purely historical and critical question he has made it a question of scientific cartography, and all his forces have been thrown on that side.

According to him it was inaccurate to write, as I had written, that what has been said about the map of Toscanelli is purely conjectural. Not so at all, says he; this map was a flat oblong map graduated in longitudes and latitudes, and its author assumed a terrestrial degree of $50 \times \frac{5}{4} = 66\frac{2}{3}$. He accomplished a scientific work, that of employing for a marine chart a projection used only for terrestrial maps, a projection which enabled him to represent on a single map Asia to the left, Europe and Africa to the right. It would seem that I had completely misunderstood the difficulties which exist in the construction of such a map, and, consequently, I had failed to appreciate its scientific importance.

I might well retort that the learned map thus described had, Minerva-like, come entirely developed from the brain of the learned professor, and also that, were this map not the result of ingenious conjectures, the other cartographers who have attempted the same task, such as Ruge, Peschel, and Uzielli, would have reached the same conclusions as he has reached,

whereas those that they have drawn differ essentially from his. But I have no need to do so, and I shall confine myself to inquiring how the demonstration, if demonstration there be, that the lost map of which Toscanelli's supposed letter to King Affonso speaks, a learned map drawn up on a scientific projection, proves that it was made by Toscanelli, and that he was justified in placing on it Asia facing Portugal and close to it.

We must not, in fact, confuse the projection of a map with the geographical details that it gives. These are two absolutely different things. The first deals with the discovery of a process whereby the parts of the globe, though really convex, may be represented, in their form and mutual relations, on a flat surface, and this gives rise to insurmountable difficulties when vast areas have to be represented. But this process only supplied a framework which has to be filled in with the results of geographical inquiries, results which may be faulty and generally are so in the beginning.

It follows that the demonstration given us leaves out the two essential factors of the controversy in the form in which the Professor of Göttingen himself has chosen to pursue it. In fact he has only just touched upon one of them in order to say that Toscanelli was justified in placing Asia close to western Europe because the Greeks also did so, and because the cartographers of the Middle Ages had followed their example, an assertion which can by no means be accepted.

As to the essential question under discussion, the authenticity of the letter and the map dated 1474, Professor Wagner establishes it by taking for granted the very fact which constitutes the subject of the controversy. He infers from the expressions in the letter that the map which accompanied it was the work of a scholar because only a scholar could have produced it in 1474. In other words, he draws from the document itself, the authenticity of which is disputed, the proof of its authenticity. In addition to putting very much into a phrase, this style of arguing takes absolutely for granted the very thing which is contested, namely: was this letter written in 1474? It may be admitted that at that date it was

not yet generally the custom to graduate a map into longitudes and latitudes as was the map mentioned in the letter. But if the letter is not genuine, if it were concocted at the time at which it was first produced, the middle of the sixteenth century, a period when graduated maps were known and even common, this reason cannot be urged in its favour.

Besides, of what value is an argument of this kind in face of all the facts which show so clearly that the documents in question were apocryphal, in view, for instance, of the information given by Vaglienti to the effect that Toscanelli believed in the eastern route to the Indies? In what is the testimony of Fernando Columbus and of Las Casas, who do not give us their sources for it, preferable to that of Vaglienti, a man who had access to the documents concerning Toscanelli?

XIV. *The objection that the forgery of the documents attributed to Toscanelli was prejudicial to Columbus*

While we maintain that the letter and map attributed to Toscanelli are forgeries, it is useless to blink the fact that a grave objection may be raised, the only objection of any value, although it has been scarcely mentioned. The truth is that, if a fraud has been committed in this affair, it must be attributed to the members of the Columbus family themselves, for it is only through them that the existence of these documents has been known, and, were it not for them, they would have remained in oblivion for ever.

Now the correspondence, unknown to every one else, which Fernando Columbus and Las Casas, the latter a confidant of the family, suppose to have existed between Columbus and Toscanelli, and the documents they produce in support of their statement, rob the great Genoese of the credit to which he held most firmly, and which he looked upon as his chief claim to fame—that he was the first to conceive the idea of going to the Indies by way of the West—in order to confer it upon the Florentine astronomer. Well, grounding its opinion on these very documents, that is just what posterity has done.

Surely that is a very singular fact!

What! Columbus, immediately on his return from his great discovery, and to the astonishment of every one, declares that his objective had always been the East Indies, and that he had come back after doing what he had set out to do; he puts himself to much trouble in obtaining scientific proofs to show that Asia, as he had said, was really not far from Spain; he quotes a long list of scholars whose writings have given him this conviction; he lays stress on the years of study that he has devoted to this subject, as well as on his voyages to the four quarters of the world, which have confirmed him in his views; and, lo! the very persons whose duty it was to defend his renown produce, without *apparent necessity*, documents which otherwise would have been for ever unknown, since no trace of them can be found elsewhere, and which completely overthrow the scaffolding Columbus has so painfully constructed by transferring to another whom he has never even mentioned the honour of being the first to conceive the possibility of reaching the East Indies by the West! Surely there must have been some imperious motives to compel the very son of Columbus, together with the first historian of his discoveries, thus to despoil him of what he held closest to his heart, by forging, or at least uttering, documents of which no one had even an inkling, and which were to have so vexatious a result.

The production of these documents, genuine or not, was unnecessary if really the objective of Columbus in 1492 was the East Indies, because an undertaking of that magnitude, which was to be carried out by three ships, and which required the collaboration of so many persons, could not have been concealed. Their production can only be explained by the fact that, contrary to what the Discoverer himself alleged, his purpose was only the discovery of unknown lands, and that it was necessary to produce a proof that his claim to have always wished to go to the East Indies was well founded, even though such proof might otherwise be damaging to him.

We shall now see that such was really the case.

XV. *The motives for the deceit*

It is known that several Spanish writers, Garcilaso de la Vega among the number, who had it from his father, have stated that Columbus owed his discovery to information given to him by a pilot whose name has remained in obscurity. This explanation of the success of the great expedition has long been considered a calumny invented by those who were jealous of Columbus, and until 1875 no modern writer has dared adopt it without exposing himself to disgrace. But since the publication of the *Historia de las Indias* of Las Casas, which took place at that date, opinions on the subject have materially changed. That admirer of Columbus informs us, in fact, that what Garcilaso later reported was currently said, and that it was a general opinion among the companions of the Discoverer that he had been told of the existence of an unknown island.

Las Casas does not vouch for the truth of this story; but he does not contradict it, and he quotes examples which make it plausible. He even adds, and this is remarkable, that it may have been learned from the lips of Columbus himself, and that it has no importance, since the Discoverer was the instrument of Providence, which may in this manner have indicated to him the way that he should follow.

It is therefore a fact accepted on the testimony of Las Casas, whom Oviedo, Gomara, and several others confirm, that until the middle of the sixteenth century the rumour was current that Columbus had had information about the islands he discovered, and that his enterprise had had no other object than to make their discovery. Had that opinion ended by prevailing, which most assuredly would have happened, since it was formed on real facts which nothing contradicted, the great undertaking which, as Columbus averred, he had organized for the purpose of carrying out a scientific idea, the consequences of which were to revolutionize the world, would have been reduced to the proportions of a vulgar voyage of discovery, which only differed from so many others of that period by its success due to prior information.

That the malignity of the jealous should have exaggerated this story is more than probable; that in passing from mouth to mouth among the ill-disposed it should take a shape harmful to Columbus is also but natural; and it is easy to understand that the family of the Discoverer should take alarm at this state of things. We may, therefore, be permitted to see here sufficient cause to justify a publication which had for its object to reverse the opinion that was forming on the discovery of 1492, and to win people back to the belief that it had really had the character which Columbus sought to give to it.

No doubt this is only a supposition; but it is in complete accord with the known facts, and it offers a logical explanation of things otherwise incomprehensible. The production of these documents had the great drawback of lessening the importance of the part played by Columbus in the discovery of America, but it also had the advantage of clearing him from the reproach of having profited by the discovery of another whose name he never mentioned, an advantage which, under the circumstances, was assuredly not to be despised.

What is absolutely certain is that an entirely new idea of the character of the expedition of 1492 dates from the moment that the documents attributed to Toscanelli were first made known. Until then, notwithstanding what the Discoverer had averred in his letters, it had been held that the expedition had had no other object than the discovery of certain islands whose existence was suspected in the far western seas. But now that opinion completely changed. In 1571, the date at which Fernando Columbus's book was printed containing the text of the letter of 1474, all the companions of the great Genoese were dead, and that letter, after finding its way into the manuscripts of Las Casas where Herrera appropriated it in 1601, was reproduced on all sides without any one thinking of questioning its character, so that the legend of the search for the East by way of the West became easily accepted. In our day it has taken such root that it is very doubtful whether criticism will ever succeed in destroying it completely.

XVI. *The consequences which follow the restoration of the true facts*

Let us leave Toscanelli, who is placed in such an invidious position by his champions, and let us grant, as so much stress is laid upon it, that he may have been the author of this 1474 map which Lelewel describes as extravagant and without scientific value; let us grant that he may have written the letter of the same date, a letter remarkable for its inaccuracies and its lack of logical sequence, its various parts hanging ill together and containing needless repetitions; let us admit without any question that the existence of documents of their importance, no trace of which can be found elsewhere, might well have been disclosed only to Fernando Columbus and to Las Casas; let us admit that Columbus may have known of them and may even have copied them; in what way can all these admissions prove that the East Indies were the aim of the latter's first expedition? That was the essential thing to prove, and, if that cannot be done, the question of the Florentine astronomer's participation in the undertaking cannot even be raised.

That the learned Florentine may continue to be regarded as the one who initiated the discovery of America, it will not suffice to prove that the documents attributed to him are authentic, which, by the way, has not been done; nor that Columbus knew of their existence, another fact which also has not been proved; it will also be necessary to show that the 1492 expedition was organized in order to carry out the advice contained in them, and that all the facts, all the evidence, all the documents, which reveal that the question of the Indies did not arise till after the return of Columbus to Palos in 1493, have led us astray.

I put forward nothing that is unknown to any one having the slightest acquaintance with the question, when I state that this has not been done, and that not even a single one of my opponents has attempted to do it.

But what really explains the vain efforts of the would-be

defenders of Toscanelli and Columbus to hide the truth is the fear, not openly avowed, that it might lessen the importance of the part played according to tradition by the illustrious Florentine and the great Genoese.

Yet, if the facts be correctly focussed, such is not the case. It is surely not detrimental to the renown of Toscanelli, if he really was the accomplished cosmographer that he is alleged to have been, to say that he could not have written the letter of 1474 nor drawn up a map on which the route to the Indies was traced westward as if he had learned it from established data. I maintain that it is an injustice to this scholar to attribute to him the geographical aberrations contained in those two documents, and that we pay a tribute of respect to his character if we prove that he could never have stultified himself by maintaining in 1480 or thereabouts, for he died in 1482, the exact contrary to what he had upheld and recommended in 1474.

XVII. *The real achievement of Columbus*

Nor do we lessen the fame of Columbus if we point out that he had discovered the very lands which he had gone to seek, lands the existence of which he ascertained by his studies, his meditations, and his constant inquiries. A Columbus of that type is by far superior to the Columbus of tradition, who, ignorant of what he has really accomplished, imagines that he has reached the East Indies, and who mistakes savage isles peopled with naked barbarians for that rich archipelago whither people went to obtain the very precious spices which Europe required.

It would greatly exaggerate the importance of the hints which Columbus is supposed to have received from a pilot, if it were thought that they had sufficed to give birth to the design which he carried out with incredible tenacity amid many and ceaseless difficulties. The formation of this design resulted from a long and persevering inquiry among pilots and seafarers who could inform him of the real value of all the information he acquired in every direction respecting the existence

of distant lands afar off in the western ocean. This kind of information was plentiful and had led to not a few efforts at discovery, which had, however, proved abortive; for it was vague, uncertain, contradictory, and often fanciful. It had to be submitted to a close scrutiny, and it was only a penetrating and enlightened mind that could separate from these disconnected rumours anything of serious import, and from it draw conclusions which experience was to justify. That is just what Columbus did, and it was the work of no ordinary man. To allege that he had only to take the trouble to go to a certain spot whither another person advised him to go is surely to calumniate and belittle him. All his life, which indeed was not without its weaknesses and quackery, bears witness nevertheless against such a supposition, and shows that his great work was his very own, and that it was not Toscanelli more than any other person who had suggested it. Therefore I repeat here what I said in closing my *Histoire de la Grande Entreprise de 1492*: Columbus discovered America because he had divined its existence and because he set out to look for it until he had found it. Toscanelli had nothing to do with that great event.

CONCLUSIONS

I here close this memoir. I have not said all that there was to say; but I think I have said enough to justify the conclusions at which I have arrived, and which I formulate again in the following manner:

The celebrated expedition of 1492 had as its commander Columbus, but, as the assistance of Pinzon was absolutely necessary to him, he had to accept his terms, which are only known to us by what the facts disclose.

These facts reveal that the object of the enterprise was not to reach the East by way of the West, but to carry out the contract made with their Catholic Majesties for the discovery of an island the existence of which Columbus declared that he knew, an island which is not named, but which in all likelihood was Antilia.

As to Pinzon, who was to some extent a partner in the undertaking, his object was the discovery of Cypangu.

After discovering land at a much greater distance than he had expected to find it, Columbus persuaded himself that he had sailed into the seas of the Indies and that the Cypangu of Pinzon was his Antilia, an illusion which he preserved to his dying day, and under which he made his three subsequent voyages.

There are many excellent reasons for alleging that the documents attributed to Toscanelli are apocryphal, and that they were concocted to support the assertion of Columbus as to the object of his 1492 expedition being the Indies, contrary to the prevailing opinion that its object was solely the discovery of an island about which he had received information.

But even if the documents were genuine, the argument would not be affected. The fact that America was discovered in the course of a voyage the object of which was not to reach the East Indies destroys all the reasons for believing Toscanelli to be the instigator of the great discovery, and then the authenticity of the documents attributed to him cease to have any other interest than that of historical curiosity. I would refer the reader who is desirous of fuller information on all these points to my *Histoire de la Grande Entreprise de 1492*, where they are fully developed with references to the sources of each assertion.

Will historic Truth, the fundamental outlines of which I have just sketched, and which it was my duty, in presence of unjustified contradictions even from high places, once more to formulate, prevail with the greater number? I gravely doubt it. There are some opinions which, once formed, are never relinquished. I refer to those opinions which Time has sanctioned, and which have thereby sunk deep into our mental habits. The legends of Columbus seeking the East by way of the West and of Toscanelli being the originator of the discovery of America are among these. They have entered into the Cycle of Belief, and no demonstration of their falsehood will

shake them from their place in the minds of those who have become attracted by them. For them it is in vain we seek to restore facts to their proper setting. The legends which owe their origin to impressionable impulses are artistic and sentimental productions on which the common logic of facts can secure no purchase. Like most beliefs, these need no proof for the minds of those for whom faith is everything, and Time alone, which has given them respectability, can ultimately prevail against them.

APPENDIX

RECAPITULATION OF THE POINTS IN CONTROVERSY

For the benefit of readers who are not familiar with the numerous questions discussed in this memoir, where only some of them have been treated at any length, I formulate here, in a clear and concise manner, all the reasons which justify us in saying that in 1492 Columbus did not propose to go to the Indies westward, as the Columbian Tradition would have it, and that Toscanelli did not advise that adventure, as we learn from another legend having the same source. To these reasons I add an impartial recapitulation of the objections raised against them by the champions of the Columbian Tradition, and I leave it to the reader to decide whether they are of a kind to make us set aside ascertained facts or to upset the conclusions that I have drawn from those reasons.

This recital will necessitate some repetitions which I hope my readers will pardon, inasmuch as they will thus be enabled to find, contained in a few pages, the essential elements of the long controversy which has sprung from the examination of this important and interesting historical question. For clearness' sake I have had the arguments and objections of the Columbian Tradition printed throughout in italics.

FIRST PART

THE AIM OF COLUMBUS IN 1492

I. Proofs that the 1492 expedition had not the East Indies for its goal

1. The silence on this matter of the contract between the Catholic Kings and Columbus, wherein there is no mention of the East Indies.

2. The silence of Santangel, a high officer of the Court, who recommends the adoption of Columbus's scheme and enumerates its advantages, but never says a word about the benefits that would result from the knowledge of a shorter route to the land of spices.

3. The silence of all those who witnessed the preparations for the expedition, and of those who took part in it; not one of whom appears to have heard a word spoken about the Indies.

4. The silence of their Catholic Majesties, who, when conferring rewards on Columbus, enumerate his services but only mention islands which he has discovered.

5. The silence of all contemporary writers, who relate the discovery made by Columbus, and who were not aware that it was made in seeking to reach the Indies.

6. The silence of Columbus himself, who never mentions the Indies until after his discovery.

7. The fact that Columbus did not form his geographical notion about the small extent of sea-space dividing the extremities of the known world until 1493 or 1494 at the earliest, a sufficient proof that his expedition could not have been based on that conception.

II. Proofs that the expedition of 1492 had for its sole object the discovery of new islands

1. The evidence to be drawn from the Capitulations, which treat only of new islands to be discovered.

2. The evidence of Maldonado, a member of the committee to which Columbus's proposals were referred, who declared that they dealt only with the islands which were discovered.

3. The evidence of those who took part in the expedition itself, or in its preparation, that its only object was the islands which were discovered.

4. The evidence of the writers of the time, who—with the exception of Herrera, who has only copied Las Casas—all say that the object of the expedition was to look for the isles which it discovered.

Objections. *If the expedition was intended for the discovery of new territories, its further object was to sail as far as the Indies.*

This is the Columbian version, but there exists no proof of the fact. We see that Columbus performed what he had undertaken to do; we do not see that he had any other purpose, and all the known facts contradict the supposition that he had.

III. Proofs that Columbus had information about what he set out to find

1. The clause in his contract with their Catholic Majesties wherein he declares that he already has information about what he is going to find.

2. The declaration he made to his crew on leaving the Canaries that land should be seen 700 or 750 leagues to the West, and the orders he gave on that account.

3. The evidence of Las Casas that Columbus spoke of the island that was to be discovered as if he had it under lock and key (*Historia de las Indias*, i. 106), and as if he had actually been there in person (ibid., p. 106).

4. The evidence of Las Casas again, who writes that Columbus possessed a chart on which 'nuestras Indias' (the Antilles) were indicated, and that he had no doubt about finding them.

5. The fact that he laid his course along the 28th parallel and persisted in keeping to it, although it was not the direction which led to the land of spices.

6. His disappointment at not finding the islands where he had thought they were situated and his persistence in continuing to look for them.

7. The evidence of his son, who, in relating the discovery of Hispaniola, says that it was the island his father went to seek.

Objection. *The assertion that Columbus had information about the lands he sought is only a supposition.*

IV. Reasons for believing that Columbus had been informed about the isles he went to seek

1. The fact that it was public gossip at the time of the discovery that the existence of the islands discovered had been revealed to Columbus by a pilot who had by chance landed on them.

2. The fact that Las Casas, who reports this belief, does not contradict it, and quotes cases which justify it.

3. The fact that not one of the Spanish writers of the period has rejected this explanation of the discovery, and that all those who mention it accept it without seeing in it anything to the discredit of Columbus; that one of his most illustrious descendants, Don Pedro Colon, on the contrary, saw in it a proof of the judgement of his ancestor, and that Las Casas admits that Providence might thus have enlightened the great Genoese about the mission which had been reserved for him.

Objections. *This story is but a sailor's yarn (Ruge); a gross concoction (Haebler, Markham); a spiteful invention which cannot be taken seriously (Gallois); and which comes from the enemies of Columbus (Humboldt, Tarducci, Gaffarel); Las Casas scornfully passes it by in silence (Washington Irving).*

The facts related above reply to these criticisms. The truth of the story about the pilot-informer is to be found in the certainty that Columbus felt as to the position of unknown lands in the Atlantic.

V. Reasons which would show that, contrary to the facts recalled in the preceding paragraphs, the Indies were the aim of the expedition of 1492

1. *The formal testimony of Columbus, whose word must be taken, who, in his letters of 1498 and of 1503, declares that the object of his 1492 expedition was to find a way to the Indies, and who supplies the theoretical reasons on which his project was based.*

These two letters are subsequent to the discovery, and only bear witness to the illusions which he had developed on the result of his undertaking. All proof is absolutely wanting that he ever spoke of going to the East Indies before his discoveries.

2. *The prefatory letter to the Log Book of Columbus, in which he says that the sovereigns enjoined on him to go to the Indies by a route different from that previously followed, proves that his design was anterior to his discoveries in 1492.*

This letter is neither dated nor signed. It is unknown to Fernando Columbus, and is not to be found either in the Archives of State, though addressed to the Queen, or in those of the Columbus family. It was Las Casas who placed it at the beginning of the Log Book, and all the critics are agreed that it is not in its proper place. It is clear from its contents that Columbus wrote it after the evolution of his ideas on the route to the Indies.

3. *The expression* las Indias *used in the Log Book is another proof that Columbus thought of the Indies before his discovery.*

It is Las Casas who makes use of this expression in his copy of Columbus's Log Book. It signifies the West Indies and not the East Indies. It could have no other meaning at the time, coming as it does from the pen of the author of the *Historia de las Indias*, a work which treats of the discovery and conquest of America.

4. *The credential letters to the Great Khan, which Columbus obtained, also prove that from the very first he proposed to go to the Indies.*

At the first blush it would certainly seem so; but such is not the case. Columbus had to submit to the demands of Pinzon, whose help was indispensable to him in organizing his expedition, and this mariner was smitten with the idea of discovering Cypangu, which was, it was thought, under the dominion of the Great Khan. It is reasonable to suppose that he asked for these letters, which it is likely he never

expected to use, merely to satisfy his lieutenant. During the voyage he only thinks of the island of which he has heard tell, and does not even once write down the name of Cypangu, of which Pinzon was constantly talking. It is only after having failed in his quest that, on the advice of Pinzon, he steered a course which, according to the latter, must lead to Cypangu, and from that moment it is only Cypangu that occupies his mind.

5. *The statement made in 1493 in Lisbon, when Columbus put in there on his return voyage, that he was coming back from the discovery of Antilia and of Cypangu, implies that the latter island, situated at the extremity of the Indies, had been from the beginning the goal of the expedition.*

Columbus's declaration was sincere. He really imagined that he had been as far as the Indies and had discovered Cypangu. He thought so all the rest of his life. But the circumstances under which the discovery was made show that it was not included in his original plan.

6. *The testimony of Fernando Columbus that the goal of the 1492 expedition was the Indies is sufficient proof of the fact.*

Criticism has shown that this testimony cannot be reconciled either with the statements of Columbian origin or with the known facts. If the assertions of the first two biographers of Columbus on this particular point were justified, we should be led into error by all the other statements, as well as by all the facts which have been adduced to the contrary. Nor would it be reasonable, moreover, to accept as proof the evidence which is in dispute, the very evidence the value of which is under discussion.

7. *The correspondence of Columbus with Toscanelli and the letter received from the latter, a letter which we possess, confirm all the Columbian evidence on the search for the Indies in 1492.*

Here again the very fact which is in question is given as a proof. The authenticity of this correspondence and of the letter produced is denied; and, even were it not, it would be

impossible to find in them the proof that the object of the expedition of 1492 was to go to the Indies, as this letter advises should be done, and not the discovery of new territories, as the various particulars cited above would rather indicate. However, it will now be shown that the reasons which exist for believing that this letter is spurious are as weighty as they are numerous.

SECOND PART

THE LETTER AND MAP OF 1492, ATTRIBUTED TO TOSCANELLI, WHICH ARE SUPPOSED TO HAVE DETERMINED COLUMBUS TO GO TO THE INDIES BY WAY OF THE WEST

Reasons for supposing that these documents are spurious

1. The silence of Columbus about Toscanelli, whose name he never wrote, although he was fond of quoting learned men on whose opinions he relied.

Objection. *If he has not mentioned Toscanelli, he has allowed it to be seen that he knew of the letter of 1474, for we find a phrase from it in the prefatory letter to his Log Book, and a copy exists of it which seems to be in his handwriting.*

The phrase in question is substantially taken from Marco Polo, a work Columbus had read and annotated.

It is not established that the copy of this letter attributed to Columbus is really by his hand. It is, indeed, much contested. This copy is found in a volume whence Fernando Columbus and Las Casas have extracted notes written by the Discoverer; yet neither of them observed this important transcription, which occupies an entire blank page. Hence we are entitled to assume that it was written after the death of Columbus.

2. The silence of Toscanelli, who has never written the name of Columbus, and among whose papers not a trace has been found of the letter and map of 1474.

3. The silence of all contemporary Italian, Spanish, and Portuguese writers, not one of whom has recorded that the Florentine astronomer had ever advised Columbus to go to the Indies by the West.

Objection. *It seems certain that the fact was known, inasmuch as the Duke of Este inquired whether there were not some documents on the subject among the papers left by Toscanelli.*

The Duke of Este knew that Toscanelli had occupied himself with the discovery of new islands, and he supposed that they were the islands which Columbus had just then discovered. That is all that is in his letter, the text of which we possess. Not a word occurs therein about a route to the Indies or about Columbus.

4. The absence of all testimony, other than that of Fernando Columbus and Las Casas, on the existence of a map, the work of an eminent astronomer, indicating a new route to the Indies. No one else has ever heard of it.

Objection. *Nevertheless Las Casas says he has had it in his possession.*

Yes; Las Casas does in fact say so in one page; but in another, vol. i, p. 278, he corrects himself by saying that he supposed the map in question to be Toscanelli's. It is only necessary to read the description he gives of it to see that it could not have been the map mentioned in the letter of 1474.

5. The fact that Fernando Columbus and Las Casas do not give their authority for what they say about Toscanelli. The supposition that has been ventured that their source of information was the papers of Columbus is inadmissible, for, had such been the case, they both would have quoted it. They always do so when they borrow anything from that quarter.

6. The absence of the original of the letter or of any settled text thereof; we have three different versions of the famous letter of 1474.

Objection. *This is almost invariably the case. It is only very rarely that we have the original text of works, though their authenticity is beyond all question.*

Original texts do not get lost or altered until they have passed through the hands of copiers for years. Such is not the case with the 1474 letter, which is supposed to have been sent direct by Toscanelli to Columbus and never to have passed to another hand.

7. The composition of this letter, with its inaccurate connexion of ideas, is not the work of a scholar accustomed to clear and definite forms of expression.

8. The substance of the letter is just as bad. It is borrowed *in toto* from Marinus of Tyre, especially that portion which treats of the very limited extent—130 degrees—given to the waterway dividing the two extremities of land, a blunder which had been corrected long before the time of Toscanelli and Columbus.

Objection. *The belief was then still held by many geographers, and might therefore well be shared by Toscanelli* (*Hermann Wagner, Gallois, &c.*).

Neither of these assertions can be admitted. When the names of the learned geographers who still accepted the measurement of Marinus of Tyre have been asked, no answer has been given. Toscanelli even less than others was justified in accepting that measurement, because he knew that Ptolemy had demonstrated its error.

9. According to the text of the 1474 letter the map accompanying it was graduated into longitude and latitude. But maps of this nature, for representing vast spaces, were not in use in 1474; they were only at that time beginning to be made, and it is to be noted that Bartholomew Columbus made one.

Objection. *Toscanelli was a scholar. He has given proof of his learning by making such a map. He is also to be admired for daring to maintain an opinion of which Ptolemy disapproved* (*Hermann Wagner*).

10. The name Cathay, given to China in this letter, is evidence that the letter is not genuine, for by 1474 many years had passed since that name had fallen out of use in the East.

Objection. *Toscanelli could not know that the name was no longer used; he only followed the European custom.*

It is said in the letter that the information about China comes from an ambassador of that country with whom the writer has conversed. It is an historic fact that no ambassador came from China at that period, and if one had come he certainly would not have called his country Cathay.

11. The 1474 letter recommending the western route to the Indies does not reflect the views of Toscanelli, who, according to the evidence of Vaglienti, his fellow-countryman and contemporary, had praised the Portuguese for having found their way to the Indies by the East.

Objection. *He may have recommended both routes* (*Uzielli.*)

12. The letter of 1474 represents exactly the ideas that Columbus professed in 1498 and 1503, and not those of Toscanelli. This fact gives weight to the opinion that the letter was concocted later in accordance with these ideas.

Objection. *Why should it not rather be that Columbus had appropriated the ideas of Toscanelli?*

Because everything indicates that the opinions developed in the letter are not Toscanelli's, while it is certain that they were the opinions of Columbus; we even know the source from which he drew them. Toscanelli has nothing to do with them.

13. As it follows from all the facts which have been enumerated that the documents attributed to Toscanelli come solely from a Columbian source; as they are not confirmed by any evidence coming from another source; and as their contents, being critically examined, as well as the circumstances in which they were made public, show that they could not have proceeded from a learned man like Toscanelli, we are entitled to regard them as spurious.

Objection. *This conclusion is not allowable precisely because these papers come solely from a Columbian source, and because they do him harm in depriving him of the credit he most prized, that of having been the very first to conceive the idea of going to the Indies by way of the West* (*Ravenstein*).

14. The fact that the production of the letter of 1474 deprived Columbus of the honour of having been the first to conceive an idea of which he persistently claimed the paternity is evident.

There must have been some motives of the greatest weight at work to compel those who were the heirs of his glory, or whose duty it was to respect his memory, such as his own son Fernando, who wrote his history, his grandson Luis Colon, who had that history printed in Italy, and Las Casas, who was the near confidant of the family, and upon whom the whole responsibility falls, to sanction and carry out this publication.

Now, these motives in fact existed. From the beginning to the middle of the sixteenth century, in all the writings of that period, but one opinion is expressed about the discovery of the New World, and that is the opinion which Las Casas himself has stated, viz. that Columbus was indebted for his discovery to the information given him by a pilot whose name he does not mention. We are therefore entitled to assume that this view, so prejudicial to Columbus, had become general, for, besides the fact that no other opinion was then expressed, we find Luis Colon obtaining from the Emperor the right to seize writings which abused his grandfather, and we know that it was at his instigation that the work of Fernando Columbus, in which the letter of 1474 appeared for the first time, was translated and printed in Italy.

However that may be, as soon as this letter was printed, public opinion changed immediately. There was no more talk about the pilot who had given information, and the belief that America was discovered in an attempt to reach the Indies, according to the advice of Toscanelli, took shape so generally

and so rapidly that even to-day it is accepted by most Columbists.

Both the family of Columbus and his admirers had therefore a moral interest of the most important kind in bringing forward facts and producing documents which, while lessening the part Columbus had played in the great undertaking, would clear him from the undeserved reproach of profiting by another's work, and would, moreover, completely confirm his account of the great undertaking, according to which it was in no way due to chance, but to the scientific working out of a geographical conception.

Let us recall here, as has been said above, that even if the documents attributed to Toscanelli were genuine, and Columbus knew of them before his discovery, that would not prove that he had followed the advice they gave as to reaching the eastern extremities of Asia by sailing to the West, or that the expedition of 1492 had been organized for that end; and this is the essential point.

FINAL NOTE

After this conscientious statement of the results of critical research, which has supplemented on so many important matters what was known of the history of Columbus when Washington Irving and Roselly de Lorgues wrote their popular accounts, I beg to call attention to a remarkable point, which must not be lost sight of. The fact, so generally accepted, that Columbus discovered America by seeking, on the advice of Toscanelli, to reach the Indies across the Atlantic westward is known to us only from Columbian sources. No one outside the Columbus family knew that this was the object of his voyage, and no information that we have on the subject from any other quarter confirms their account. On the contrary, everything appears to contradict it.

I leave the unprejudiced reader to say if the conclusions to be drawn from this capital fact and from all those which have been stated are justified, or whether it is right, as an author unacquainted with the intricacies of the question wrote (13), that, everything notwithstanding, the two enticing legends of the *Search for the East by the West* and of *Toscanelli the initiator of the Discovery of America* should continue to figure in the great book of History.

NOTES

(1) Paris, Welter, 1911, 2 vols. in 8vo, with analytical and alphabetical tables.

(2) *Al. X° Congresso internazionale di Geografia.* Rome, 1913, 1 vol. Grand in-8vo, 1514 pages. Maps.

(3) *Archivio Storico Italiano.* Florence, 1913, 8vo.

(4) *La lettre et la carte de Toscanelli sur la route des Indes par l'Ouest* . . . Paris, Leroux, 1901, 1 vol. 8vo, p. 320. Facsimile.

(5) *Memorial de Agravios del Almirante* . . . in the *Nuevos Autografos* of the duchess d'Albi. Madrid, 1902. In fol., pp. 25–8.

(6) *Cartulaire de Colomb*, edited by Spotorno, Genoa, 1823, and by Stevens, London, 1893 in fol. Text and translation in our *Histoire de la Grande Entreprise de 1492.* Paris, 1911, 2 vols. 8vo, vol. ii, p. 373 et seq.

(7) On this point see our *Histoire de la Grande Entreprise*, vol. ii, p. 99 et seq.

(8) In the *Pleitos de Colon*, vol. ii, pp. 101–3, and in our *Histoire* . . . vol. ii, p. 598 et seq., text and translation.

(9) The *Historie* of F. Columbus, chap. xxi, fol. 50. See also our *Histoire de la Grande Entreprise*, vol. ii, pp. 174–5.

(10) See what we have said on this subject. *Grande Entreprise*, vol. ii, pp. 52–6.

(11) *Grande Entreprise* . . . vol. ii, p. 182.

(12) Duro, Asensio, *Cristobal Colon*, vol. i, pp. 262–4.

(13) Biggar: *The New Columbus* (Annual Report of the American Historical Association for 1912). Washington, 1914, p. 104.

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